

INCH-POUND

MIL-PRF-64266/2A  
6 January 2012  
SUPERSEDING  
MIL-PRF-64266/2  
25 November 2008

# PERFORMANCE SPECIFICATION SHEET

CONNECTORS, FIBER OPTIC, CIRCULAR, PLUG STYLE,  
MULTIPLE REMOVABLE GENDERLESS TERMINI, SCREW THREADS,  
ENVIRONMENT RESISTING

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring fiber optic connectors described herein  
shall consist of this specification sheet and MIL-PRF-64266.

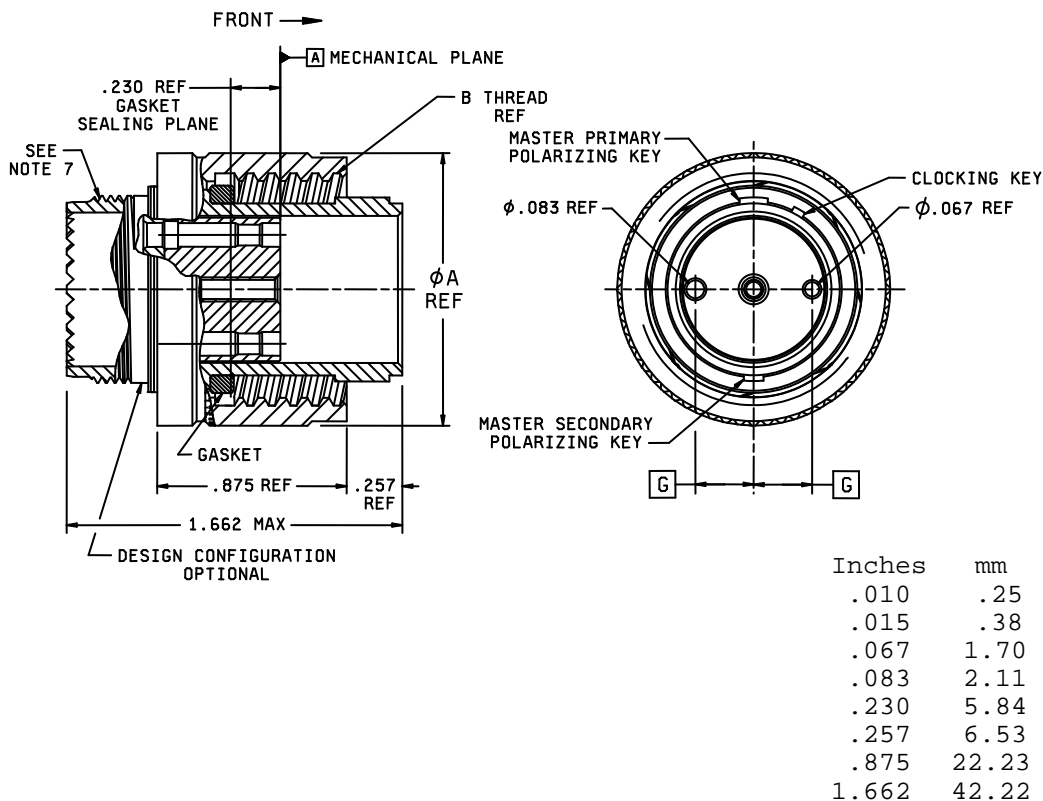


FIGURE 1. Plug connector.

AMSC N/A

FSC 6060

## MIL-PRF-64266/2A

Shell size	A dia max	B Thread REF	G
11	1.028 (26.11)	.7500- .1P- .2L-DS	.140 (3.56)
13	1.141 (28.98)	.8750- .1P- .2L-DS	.178 (4.52)
15	1.263 (32.08)	1.062- .1P- .2L-DS	.270 (6.86)
23	1.705 (43.31)	1.5000- .1P- .2L-DS	.400 (10.16)

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents (mm) are in parentheses.
4. Dimensions apply to plated/finished part.
5. Mating key positions and dimensions are shown on figure A-3 of MIL-PRF-64266.
6. Connector plug interface dimensions shall be in accordance with MIL-PRF-64266, figure A-1.
7. Back end connector design for attachment of non-rotatable backshell. Connector backshell accessory interface shall be in accordance with MIL-PRF-64266, figure A-6.
8. The color band shall be yellow and in accordance with EIA-359 for all shell sizes.
9. Insert retention mechanism not shown.
10. For connector insert arrangements and interface dimensions, see appendix B, figures B-1 through B-6 of MIL-PRF-64266.

FIGURE 1. Plug connector - Continued.

## REQUIREMENTS:

Dimensions and configurations: See figure 1 herein and MIL-PRF-64266 appendix A, figure A-1, and figure A-3.

Weight (without termini): See table I

TABLE I. Weight (without termini).

Sell size	Weight, max.	
	ounces	grams
11	2.0	56.7
13	2.5	70.875
15	3.0	85.05
23	4.3	121.905

Fiber optic cable:

Cable diameter:  $0.315 \pm 0.020$  inch ( $8.00 \pm 0.50$  mm,  $0.425 \pm 0.043$  inch ( $11.80 \pm 1.10$  mm),  $0.563 \pm 0.039$  ( $14.3 \pm 1.00$  mm) or  $.817 \pm .049$  inch ( $20.75 \pm 1.25$  mm).

Protective caps: Each connector shall be supplied with protective caps over the front and rear portions of the connector.

Insert arrangement: See appendix B of MIL-PRF-64266 for desired shell size. Insert shall be marked with the identification numbers of the insert cavity positions on both the front and rear faces.

Termini: Genderless. See MIL-PRF-29504/18. For dummy terminus, see MIL-PRF-29504/19. For keyed terminus, see MIL-PRF-29504/20.

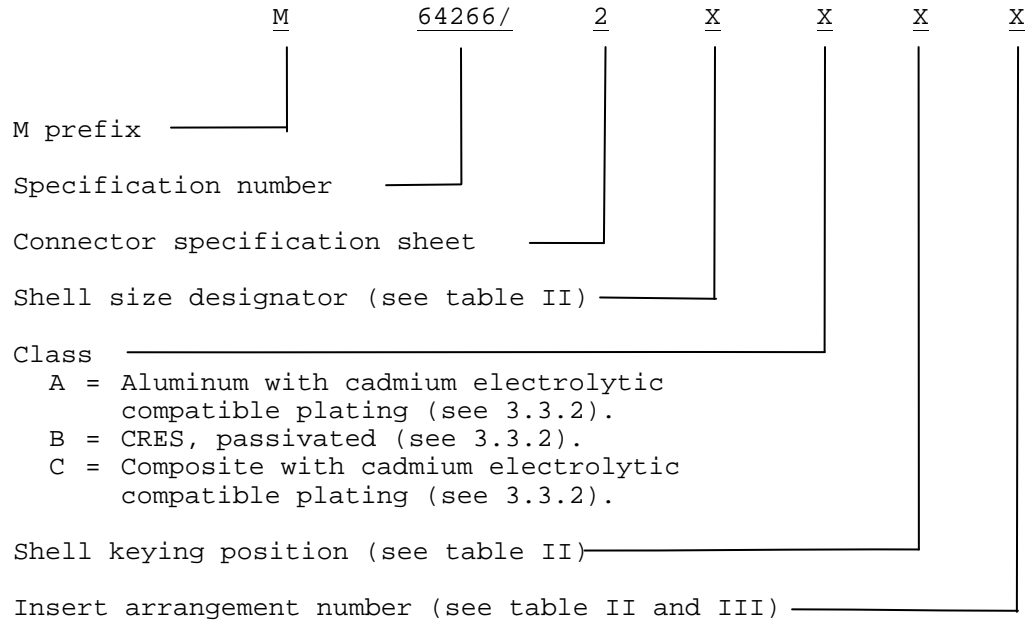
Alignment Sleeve retainer (ASR): A MIL-PRF-64266/9 ASR shall not be installed in the plug as part of this PIN. The MIL-PRF-64266/9 ASR, when application requires installation into a plug connector, shall be obtained through a separate PIN (M64266/9).

Cleaning procedures: Each shipment of connectors shall include recommended cleaning procedures. The following wording or equivalent is recommended: "To clean, use lint free wipe dampened with alcohol and blow dry with air".

Shell polarization: 1 through 12 keyway positions. See MIL-PRF-64266 appendix A, figure A-3.

## Marking:

Part or Identifying Number (PIN): Mark on coupling ring of connector plug (see tables II and III).



PIN Examples: M64266/2B11  
 M64266/2BAC4

TABLE II. PIN designators.

Shell Size	Shell size designator	Shell key position designator 1/	Insert arrangement number
11	B	1 through 9 A, B and C	1, 2, 3, or 4
13	C	1 through 9 A, B and C	1, 3
15	D	1 through 9 A, B and C	1, 2, 3, or 4
23	H	1 through 9 A, B and C	1, 3

1/ Shell key position designator "1" is the common shell key position and the one to specify when there is no need to have multiple connectors with multiple shell positions.

TABLE II. Insert arrangement.

Insert arrangement number	Terminus non-keyed /keyed 1/	Number of cavities (termini per connector) for each shell size 2/			
		11	13	15	23
1	M29504/18	2	6	8	36
2	M29504/18	4	NA	10	NA
3	M29504/20	2	6	8	36
4	M29504/20	4	NA	10	NA

## Notes:

- 1/ Non-keyed terminus is a MIL-PRF-29504/18 terminus with a domed end face and PC polish. Keyed terminus is a MIL-PRF-29504/20 terminus that will be terminated with a domed end face with either a PC or an APC polish.
- 2/ Insert arrangement number is based on both the terminus type (non-keyed or keyed) and number of cavities in the insert (number of termini that can be placed into the connector).

Mating counterpart: Receptacle connectors specified in MIL-PRF-64266/1 and MIL-PRF-64266/3.

Installation and removal tools: As specified in NAVSEA drawing 8283460. A copy of this document can be obtained at web site:  
<https://fiberoptics.nswc.navy.mil>.

For qualified products listing, quality conformance, and periodic inspections, dummy termini shall be used in all unused cavities.

Changes from previous issue: The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. This is done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of the document based on the entire contents irrespective of the marginal notation and relationship to the last previous issue.

Referenced documents. In addition to MIL-PRF-64266, this specification sheet references the following documents:

MIL-PRF-29504/18	MIL-PRF-64266/3
MIL-PRF-29504/19	MIL-PRF-64266/9
MIL-PRF-29504/20	NAVSEA drawing 8283460
MIL-PRF-64266/1	EIA-359

Custodians:

Army - CR  
Navy - SH  
Air Force - 85  
DLA - CC

Preparing activity:

DLA - CC

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Review activities:

Army - MI  
Navy - AS  
Air Force - 13, 19, 93, 99  
NASA - NA

NOTE: The activities listed above were interested in this document on the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil>.